

REMARKS/ARGUMENTS

The Office action dated July 8, 2010 has been received and carefully considered. By this amendment, claims 1, 10, 17, and 19 were amended, no new claims have been added. After entry of this Amendment, claims 1-2, 4-7, and 9-15, and 17-20 will be pending, and claim 16 is withdrawn. In view of these amendments and the following remarks, the applicant respectfully requests reconsideration.

Restriction/Election

Applicant appreciates the examiner's review of prior arguments and withdrawal of the restriction relative to claims 17-20. Claim 16 is withdrawn as being directed to non-elected subject matter. The applicant confirms prior election of species to the embodiment shown in Figure 1.

35 USC §103

The Office rejected **claims 1-2, 4, 10-12, and 17-19** as being obvious over Markbreiter (U.S. Pat. No. 3,837,172) in view of Child et al. (U.S. Pat. No. 5,295,350). The applicant respectfully disagrees, especially in view of the amendments herein.

Claims 1, 10, and 17 (and 4, 6-9, and 11-12, and 18-19 by virtue of their dependence on amended claims 1, 10, and 17, respectively) require that the liquefied natural gas is split into two streams at different pressures, wherein the stream that is employed as a working fluid must have a pressure differential of at least 1000 psig relative to the stream that is employed as reflux. This limitation is neither literally, nor inherently taught or suggested by Markbreiter et al. and Child et al.

The applicant concedes that Markbreiter can be considered as a primary reference. The applicant also agrees that Child teaches use of LNG as a heat sink where the heated LNG has a pressure of between about 285 psi and 2850 psig and a temperature of between 100 and 300 °F. However, neither Markbreiter nor Child teach or suggest a substantial pressure differential of at least 1000 psig between first and second LNG streams as presently claimed. Indeed, if one would modify Markbreiter to provide the pressure differential as claimed, heating in the heater 4 would lead to overpressurization of rectifying column overhead in the downstream pipeline and render

Markbreiter inoperative for the intended purpose. There is also no motivation in Child et al. to use two different pressure levels as expansion of the LNG in expander 183 is only based on the upstream heating of the LNG. Therefore, and at least for these reasons, claims 1-2, 4, 10-12, and 17-19 should not be held obvious over Markbreiter in view of Child et al.

35 USC §103

The Office rejected **claims 5-7, 9, 13-15, and 20** as being obvious over Markbreiter in view of Child et al. and Burns (U.S. Pat. No. 3,362,175), Shue (U.S. Pat. No. 6,125,653), or Gantt (U.S. Pat. No. 2,500,353). The applicant respectfully disagrees, especially in view of the amendments herein.

With respect to claims 5-7, 9, 13-15, and 20 it is noted that these claims are dependent on amended claims 1, 10, and 17, respectively. Therefore, the same defects and arguments as noted above apply. Regarding Burns, Shue, and Gantt, it is noted that the office essentially used the same reasoning. Applicant therefore only addresses these references together. Most notably, it is pointed out that none of the added references fail to remedy the defects as noted for claims 1, 10, and 17 above. Therefore, and at least for these reasons, claims 5-7, 9, 13-15, and 20 should not be held obvious over Markbreiter in view of Child et al. and further view of Burns, Shue, or Gantt.

Request For Allowance

Claims 1-2, 4-7, and 9-15, and 17-20 are pending in this application, with claim 16 being withdrawn. The applicant requests allowance of all pending claims.

Respectfully submitted,
Fish & Associates, PC

Date: October 6, 2010

By: /Martin Fessenmaier/
Martin Fessenmaier, Ph.D.
Reg. No. 46697

Fish & Associates, PC
2603 Main Street, Suite 1000
Irvine, CA 92614-4271
Telephone (949) 943-8300